

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-14 (canceled).

Claim 15 (currently amended): A method for wire-free transmission of data, said method comprising ~~the steps of:~~

transmitting data in time slots using a frequency-division multiplex method, a time-division multiplex method, and with time division duplexing, a transmission frame having 16 time slots;

modulating said data onto a carrier frequency using a Gaussian Minimum Shift Keying GMSK modulation method; and

changing said carrier frequency after a predetermined time period;

wherein an active time slot in which said data is transmitted is followed in each case by an inactive time slot in which no data is transmitted.

Claim 16 (previously presented): The method according to claim 15, wherein between 80 and 100 carrier frequencies are used.

Claim 17 (currently amended): The method according to claim 15, wherein said data is transmitted in a frequency band between 2.4 GHz and 2.4835 GHz ~~GHz~~.

Claim 18 (currently amended): The method according to claim 15, wherein said predetermined time period after which said carrier frequency is changed corresponds to one of a the time slot, a the transmission frame, and an integer multiple of one of a the time slot and a the transmission frame.

Claim 19 (canceled)

Claim 20 (currently amended): The method according to claim 15 ~~19~~, wherein a time duration of said inactive time slots is half a time duration of said active time slots.

Claim 21 (currently amended): The method according to claim 15 ~~19~~, wherein a carrier frequency for a next active time slot is changed during a presently transmitting inactive time slot.

Claim 22 (currently amended): A transmission system for wire-free transmission of data, said transmission system comprising:

a fixed station having a first transmitter for transmitting ~~data in time slots~~ using a frequency-division multiplex method, ~~a~~ and a time-division multiplex method ~~data~~, and with time division duplexing, and for modulating said data onto a carrier frequency, and for demodulating said data using a Gaussian Minimum Shift Keying GMSK modulation method, and for changing said carrier frequency after a predetermined time period, and sixteen transmitted time slots being a transmission frame and an active time slot, in which said data is transmitted, being in each case followed by an inactive time slot in which no data is transmitted; and

at least one mobile station having a second transmitter for transmitting data in time slots using the frequency-division multiplex method, and the ~~a~~ time-division multiplex method ~~data~~, and with time division duplexing, and for modulating said data onto the a carrier frequency and for demodulating said data using a the Gaussian Minimum Shift Keying GMSK modulation method, and for changing said carrier frequency after a the predetermined time period, and sixteen transmitted time slots being a the transmission frame, and the active time slot, in which said data is transmitted, being in each case followed by the inactive time slot in which not data is transmitted.

Claim 23 (previously presented): The transmission system according to claim 22, wherein between 80 and 100 carrier frequencies are provided.

Claim 24 (currently amended): The transmission system according to claim 22, wherein a frequency band of between 2.4 GHz and 2.4835 GHz is provided for transmission of said data.

Claim 25 (currently amended): The transmission system according to claim 22, wherein said predetermined time period after which said carrier frequency is changed is set to one of a the time duration of a time slot, of a the transmission frame, and of an integer multiple of one of a the time slot and a the transmission frame.

Claim 26 (canceled)

Claim 27 (currently amended): The transmission system according to claim ~~22~~ 26, wherein a time duration of inactive time slots is half a time duration of active time slots.

Claim 28 (currently amended): The transmission system according to claim ~~22~~ 26, wherein said first transmitter is further configured for selecting a the carrier frequency of ~~an~~ the active time slot in each case during a preceding inactive time slot; and wherein said second transmitter is further configured for selecting a the carrier frequency of ~~an~~ the active time slot in each case during a preceding inactive time slot.